



River Herring Spawning Habitat Use

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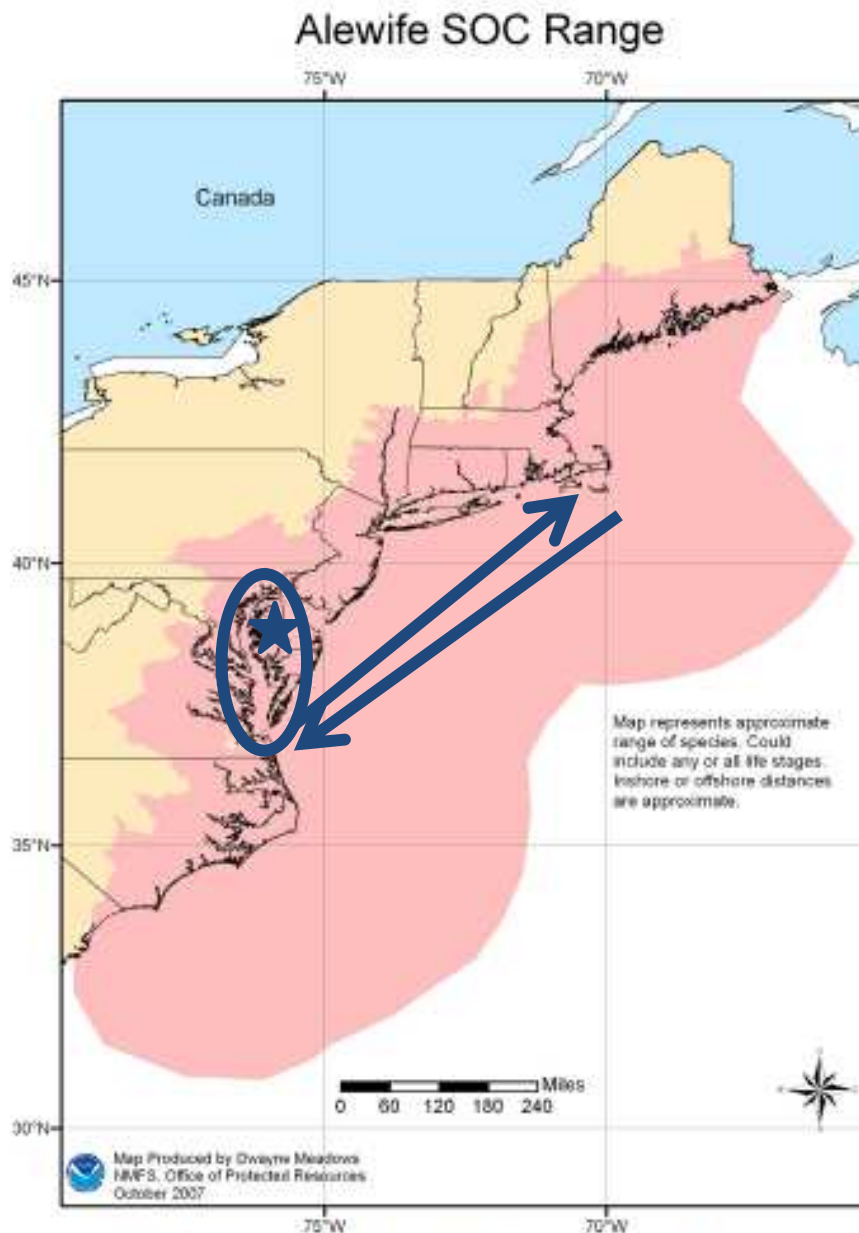


Figure 1. Range of alewife species of concern.

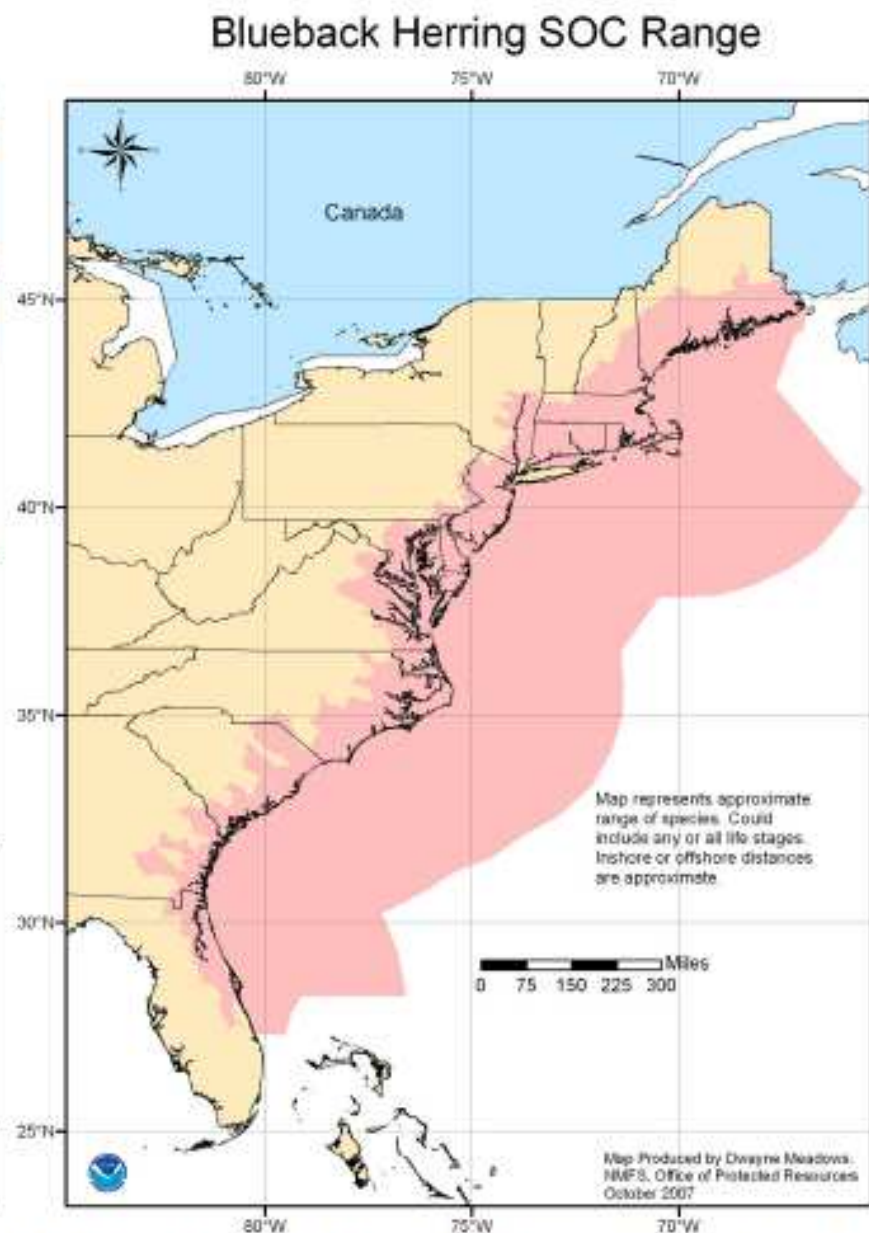


Figure 2. Range of blueback herring species of concern.





Maryland Commercial Landings

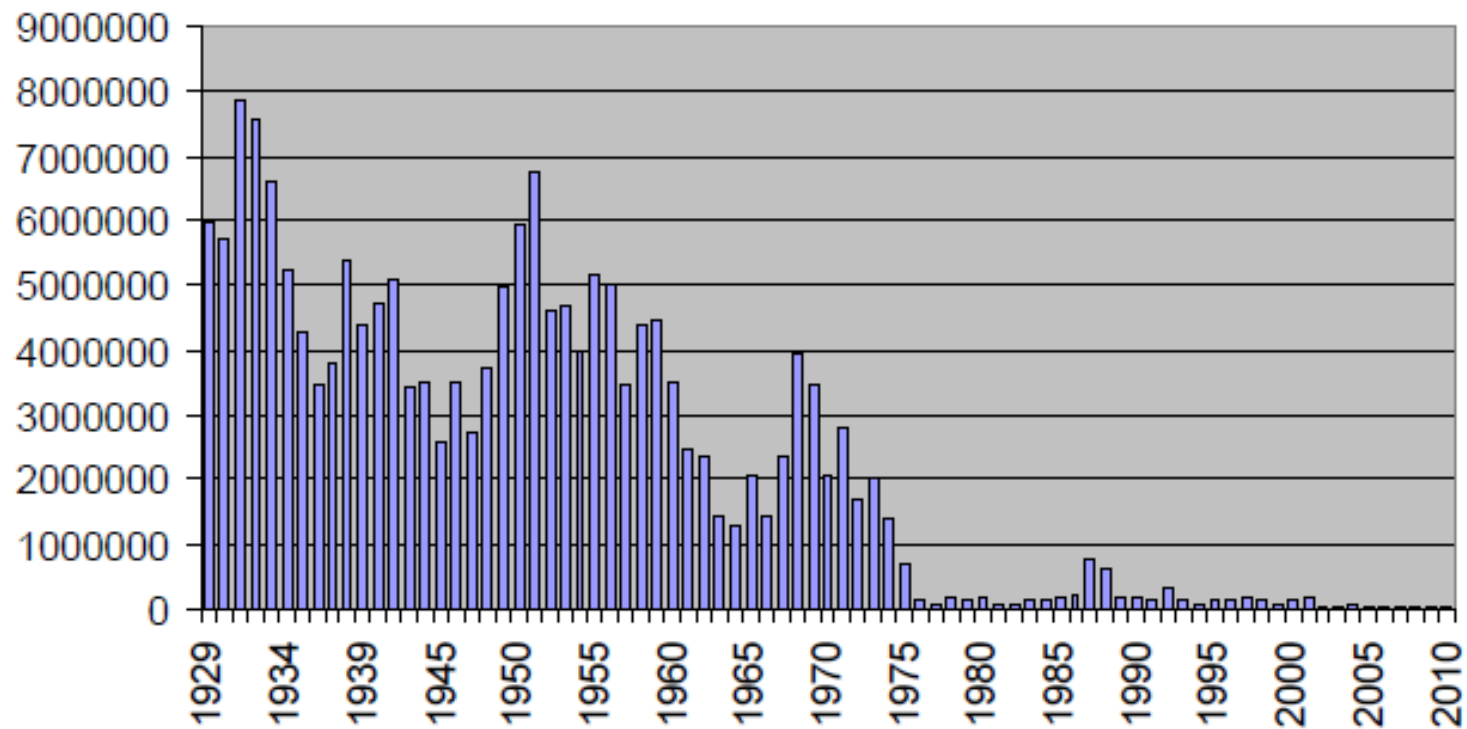
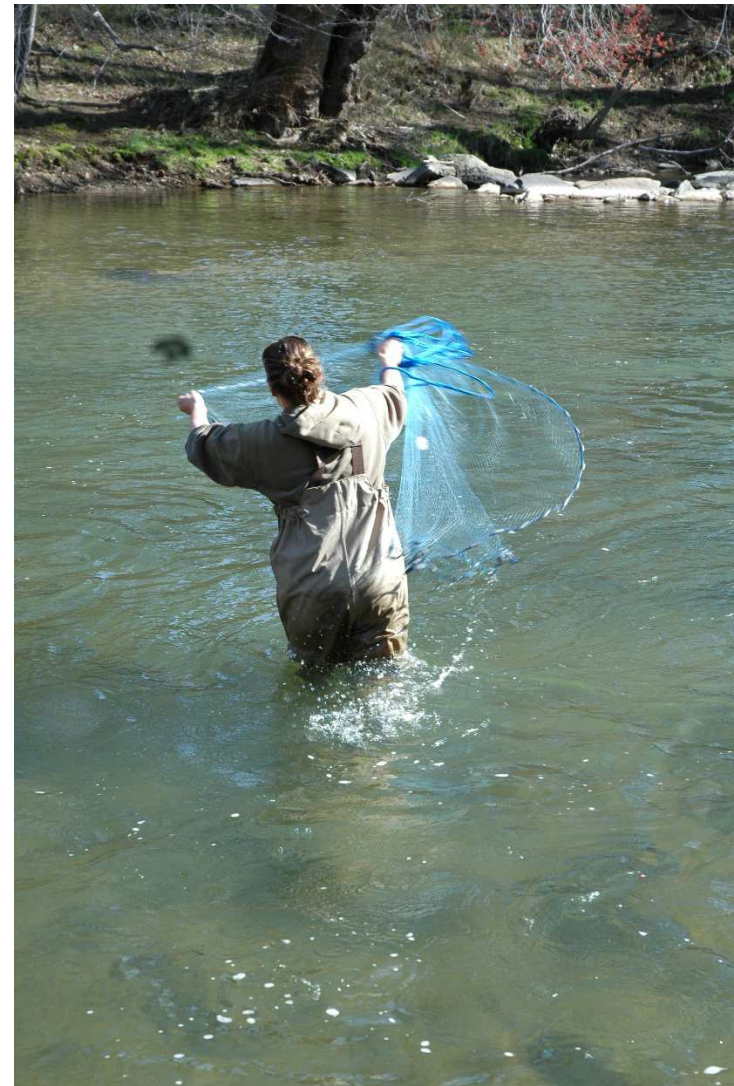
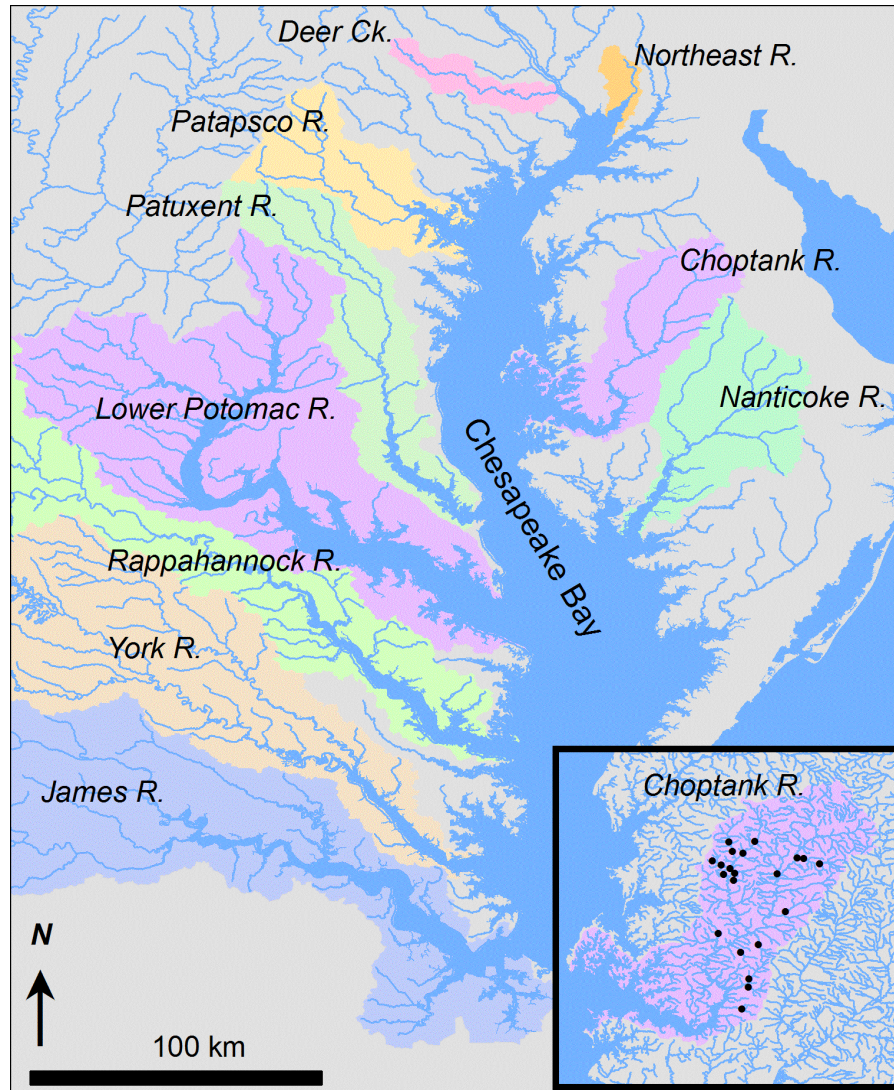


Figure 13.2 Commercial river herring landings from Maryland waters, 1929-2010.

Research questions

1. What are the characteristics of important spawning habitats in the Chesapeake watershed and what is their spatial distribution?
2. How effectively are fish moving upstream of fish passage structures and dam removals?
3. Will habitat use expand if populations increase in response to conservation efforts?

Spawning habitat quality and use



Spawner habitat use survey

Temperature, conductivity, DO

Visual and cast net sampling

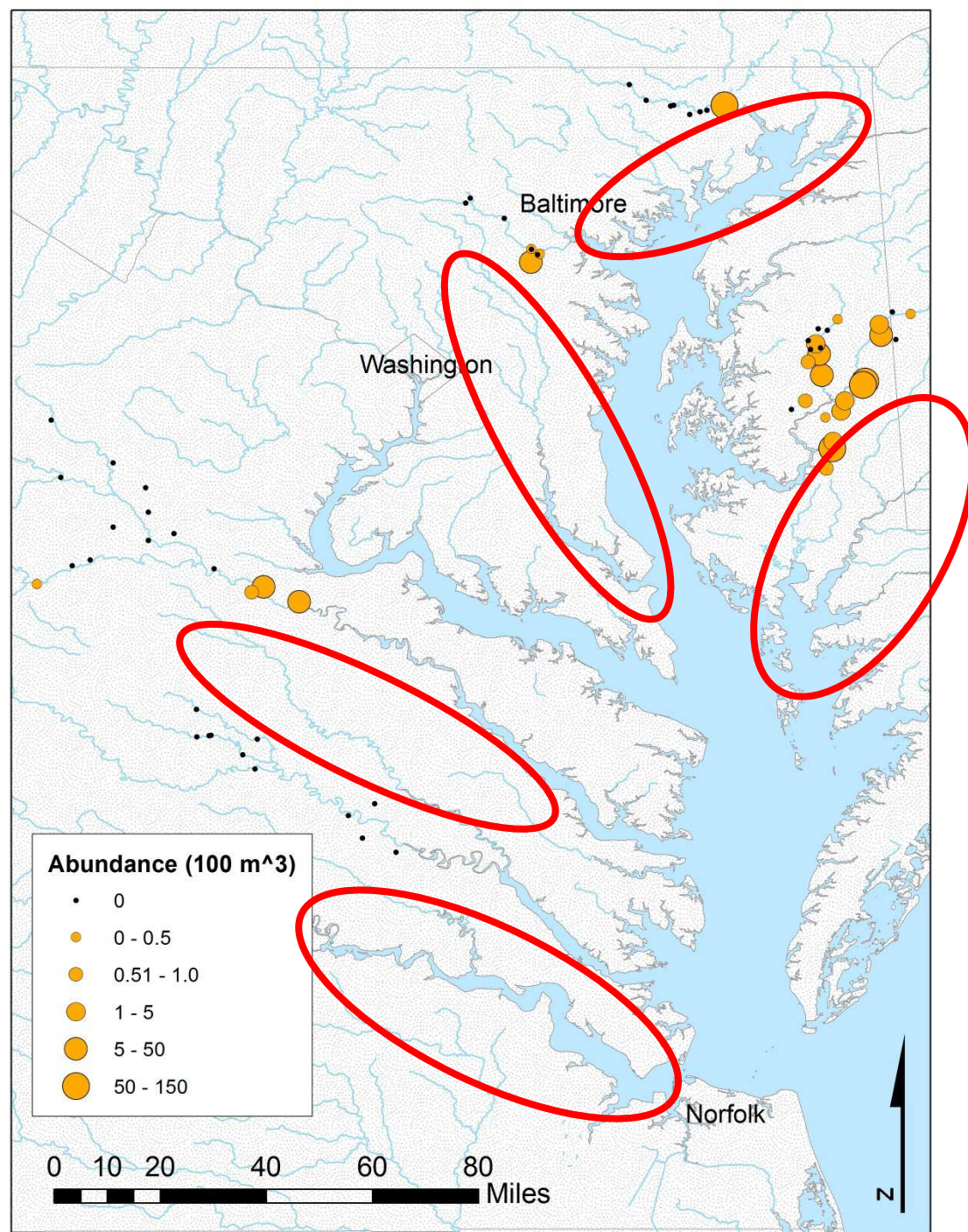


Ichthyoplankton sampling

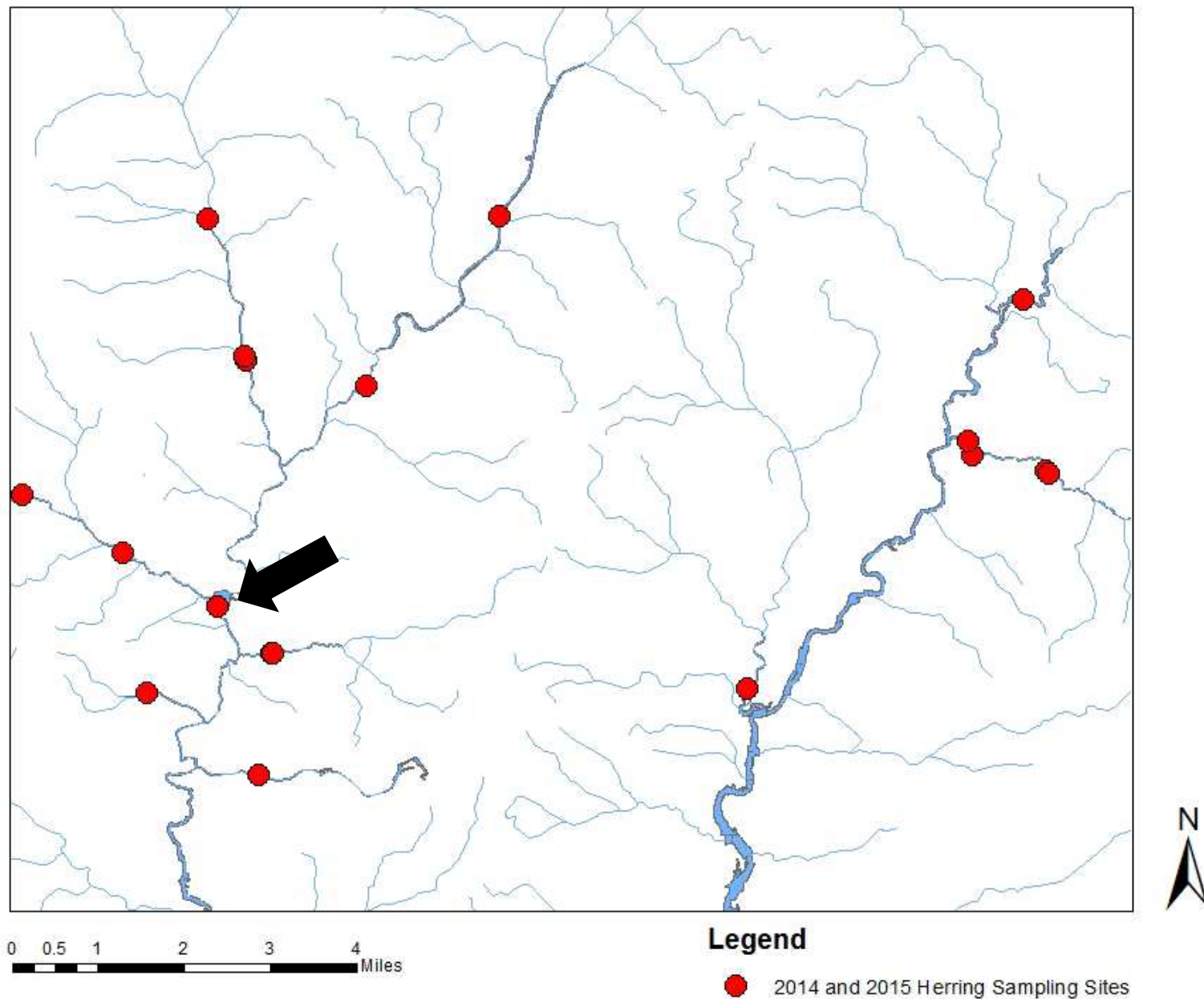


Environmental DNA collection





River Herring sampling locations along Choptank River



River Herring sampling locations along Choptank River and 1m Land cover/ Land Use



Land cover imagery courtesy Chesapeake Conservancy

Opportunities

- Incorporation of water quality, sediment type, or other stream monitoring data in spatial modeling efforts for river herring
- Collaborative sampling for long term monitoring of habitat use
- Citizen science – a distributed network to document river herring presence/absence